Remarks

Claims 1-11 remain in the application. The Examiner asserted new grounds of rejection, arguing the claims are anticipated by a newly cited reference. However, as discussed in detail in the arguments below, express limitations of the claims particularly and patentably define the present invention over the teachings of the cited references. All of the claims are considered allowable as discussed in greater detail below.

The Examiner rejected claims 1-11 as anticipated Faletti et al. As to claims 1 the Examiner argued that Faletti discloses an engine compression braking apparatus utilizing a variable geometry turbocharger, but misattributes certain claimed subject matter to the reference's description of features that act in a substantially different way. In particular, the electronic control module of the reference actually responds to throttle actuation as described in the excerpts relied upon by the Examiner. Such response departs substantially from inhibiting response to throttle actuator as defined in the claims. Moreover, while the electronic control of the reference senses engine speed, there is no indication that such speed is an overspeed limit or upper end of an operating range. The reference does not teach or suggest that that such a speed limit is a threshold for triggering an override of the throttle actuator and to avoid an overspeed operation limit. Preferably, as claimed, the response of the claimed control is to adjust fuel feed, and in particular prevent throttle actuation from fueling the engine when the engine speed reaches a high limit. As a result, the claimed method for controlling operating a compression ignition engine of claim 1, the engine control for a vehicle of claim 6 and the computer readable storage medium with instructions as defined in claim 9 are not anticipated by or motivated as an obvious variation of the teachings of Faletti et al.

The Examiner argued that column 12 lines 27-61 support a throttle control by limiting response to throttle actuation determined to be undesirable. At no time does the description determine throttle operation to undesirable. Rather, the reference expressly requires the driver's foot to be off the throttle and the clutch in order to activate compression braking. See column 12, lines 44-48. Moreover, as expressly recited at column 12, lines 57-

60, throttle actuation is an input responded to by the system to discontinue compression braking. As a result, inhibiting response to the throttle actuation is a substantial departure from the actual teachings of Faletti et al.

The Examiner also argued that sensing when the engine is in overspeed operation is supported by the reference at column 11, lines 10-65 and column 12, lines 27-61. Neither of these passages nor the rest of the reference discuss overspeed protection, the interruption of fueling when engine is too high despite the operator's pressing on the pedal and how it interplays with a brake actuator system. Rather as described by Faletti et al, his invention pertains to a braking control that provides control over braking power by controlling turbocharger geometry. While the reference expressly refers to "determining when cylinder number one of the engine reaches TDC between compression and power strokes as well as engine rotation direction, no reference to overspeed and its sensing as an input to the electronic control module is discussed. Rather, the description refers to controlling braking or limiting boost that would otherwise cause damage to engine components.

The Examiner also argued that responding to sensing said overspeed operation and inhibiting response to throttle control actuations is included in the reference. As discussed above, throttle control actuation is expressly responded to in the braking system of the reference to deactivate compression braking. Moreover, there is no interplay between overspeed detection and overriding or inhibiting a response to throttle control actuation such as cutting off fuel delivery at a high speed limit. Rather Faletti's braking system can be prevented from enabling the engine brakes, even in an engine overspeed condition, by simply depressing the accelerator pedal. The claimed invention provides a substantially different benefit. Movement or repositioning of the accelerator pedal doesn't matter once the engine speed exceeds an overspeed limit because response to the actuation is inhibited once the overspeed threshold has been reached. Such a feature is substantially different from any functions described or suggested by Faletti et al. As a result, independent claim 1 and dependent claims 2 through 5 particularly and patentably define the present invention over the teachings of Faletti et al.

Similarly, the engine control of claim 6 in which a sensor detects engine operation past an overspeed threshold, a controller input that results in inhibiting response to throttle actuation (rather than accepting it), and a controller command enabling compression braking while overspeed condition continues, are features not taught and suggested by the teachings of Faletti et al. Rather the safety of inhibiting response to the throttle actuation, typically preventing additional fueling of the cylinders, avoids fuel being unburned and released through the compression braking system. Such control is not taught by Faletti et al. Rather actuation of the throttle, according to the teachings of Faletti et al. is a signal to turn off the compression braking, and Faletti et al. does not designate any speed range in which an overspeed event would be recognized in the control. Rather, the ability of the control system to respond to an overspeed detection is taught only by applicant's disclosure, and does not result from the teachings of Faletti et al. and other references. The fact that throttle position, clutch switch and engine speed are all inputs to a control module for engine compression braking systems does not anticipate the invention. Accordingly, independent claim 6 and dependent claims 7 and 8 likewise expressly and patentably distinguish the present invention from the teachings of the cited reference and other references of record.

In much the same way, the control instructions and the storage medium defined in claim 9 do not find support in the teachings of Faletti et al. As discussed above, engine speed input does not teach or suggest overspeed recognition or the operating condition of an engine speed at a threshold that provokes a response. Moreover, instructions for responding to an overspeed threshold by inhibiting response to throttle actuation is substantially contrary to Faletti et al.'s teaching of a braking system that responds to a throttle actuation at the cited excerpts. Moreover, the combination of including commands for reduced engine speed by engine compression braking in addition to the inhibiting response, preferably to an operator's request for more fuel, by cutting fuel delivered to the cylinders despite an operator's continued pedal operation, distinguishes the claims from the cited prior art references.

In view of the foregoing, applicant respectfully submits that the present application is now in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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